



State of Ohio Environmental Protection Agency

Southwest District Office

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Dayton, Ohio 45402

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www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

June 8, 2009

Logan County Board of Commissioners
117 East Columbus Street, Suite 100
Bellefontaine, Ohio 43311

RE: Indian Lake Water Pollution Control District Compliance Evaluation Inspection / Notice of Violation.

Dear Board of Commissioners:

On May 28, 2009, Joe Reynolds conducted a Compliance Evaluation Inspection at the Indian Lake Water Pollution Control District waste water treatment plant. The inspection was conducted as part of a compliance review the plant with respect to the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit issued to the county.

The findings from this inspection are included in the attached report. The report contains two items that requires a response. Please provide a written response to these items by no later than the dates noted.

If you have any questions regarding the report, you may contact Joe Reynolds at (937) 285-6097.

Sincerely,

Martyn G. Burt
Division of Surface Water

Enclosure

cc: Garis Pugh, District Manager
Ron Jacob, Operations Manager





State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PK00002*KD	OH0036641	05/28/2009	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Indian Lake WPCD 1015 Orchard Island Road South Russells Point, Ohio 43348	9:15 AM	8/1/2006
	Exit Time	Permit Expiration Date
	12:20 PM	1/31/2011
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Garis Pugh, District Manager Ron Jacob, Operations Manager Don Corwin, Lead Operator	(937) 843 - 3328 (937) 843 - 3328	
Name, Address and Title of Responsible Official	Phone Number	
Logan County Board of Commissioners 117 East Columbus Street, Suite 100 Bellefontaine, Ohio 43311	(937) 599 - 7284	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
M	Records/Reports	N	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	N	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	M	Sludge Storage/Disposal	N	Other
M	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
See attached Report.	
Inspector	Reviewer
Joe Reynolds Division of Surface Water Southwest District Office <i>[Signature]</i> Date 6/18/09	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office



Permit # :
NPDES #: Error! Reference source not found.

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Correct name and location of receiving waters..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... Y
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application... Y
- (f) New treatment process(es) added since last inspection..... N
- (g) Notification given to State of new, different or increased discharges..... N/A
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

Section E: Permit Verification

- (a) Any significant violations since the last inspection..... N
- (b) Permittee is taking actions to resolve violations..... N/A
- (c) Permittee has a compliance schedule..... Y
- (d) Compliance schedule contained in NPDES Permit.
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:



Permit # :
NPDES #: Error! Reference source not found.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed Y
- (b) Adequate alarm system available for power or equipment failures.. N
- (c) All treatment units in service other than backup units..... Y
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... III
- (e) Operator of Record holds unexpired license of class required by permit..... Y
Class: III
- (f) Copy of certificate of Operator of Record displayed on-site..... Y
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... Y
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... N
- (j) Operation and maintenance manual provided and maintained.... Y
- (k) Any plant bypasses since last inspection..... Y
- (l) Regulatory agency notified of bypasses..... Y
On MORs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... Y

Record Keeping:

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

Log books are maintained in each building. Only one is hardbound. Spiral note books are used as well.
- (c) Log book(s) kept onsite (in an area protected from weather)..... Y
- (d) Log book contains the following:
 - I. Identification of treatment works..... Y
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... N
 - III. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... Y
 - IV. Laboratory results (unless documented on bench sheets)... Y
 - V. Identification of person making log entries..... N
- (d) Has the operator of record submitted written notification to the permittee, Ohio EPA and (if applicable) any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... Y



Permit # :
NPDES #: Error! Reference source not found.

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... Y
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... Y
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... N
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power
or equivalent..... Y
- (i) Is there an inflow/infiltration problem (separate sewer system),
or were there any major repairs to collection system since
last inspection..... Y
- (j) Any complaints received since last inspection of basement flooding N
- (k) Are any portions of the sewer system at or near capacity..... N

Comments/Status:



Permit # :
NPDES #: Error! Reference source not found.

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted N/A
- (b) Sludge management plan current..... N/A
- (c) Sludge adequately disposed..... Y
(Method:Haul to a landfill)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name:Allied Waste)
- (f) Has amount of sludge generated changed significantly since
last inspection..... N
- (g) Adequate sludge storage provided at plant.....N
- (h) Land application sites monitored and inspected per SMP..... N/A
- (i) Records kept in accordance with State and Federal law..... Y
- (j) Any complaints received in last year regarding sludge..... N
- (k) Is sludge adequately processed (digestion, pathogen control)..... N/A

Comments/Status:

Since sludge is being disposed at a sanitary landfill, the sludge must meet the paint filter test. Currently the sludge is not meeting Class A or B standards

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir Weir
Calculated from influent Other (Specify:Mag. meter)
- (b) Calibration frequency adequate Y
(Date of last calibration:)
- (c) Secondary instruments operated and maintained.....Y
- (d) Flow measurement equipment adequate to handle full range
of flows..... Y
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency
Daily Weekly monthly other

Comments/Status:



Permit # :
NPDES #: Error! Reference source not found.

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
- (d) Sample collection procedures are adequate..... Y
 - (i) Samples refrigerated during compositing..... Y
 - (ii) Proper preservation techniques used..... Y
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y
- (e) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e, continuous monitoring instrumentation, calibration and maintenance records)..... Y
- (f) Adequate records maintained of sampling date, time, location, etc.. Y

Laboratory:

General

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. N/E
- (b) If alternate analytical procedures are used, proper approval has been obtained..... N/E
- (c) Analyses being performed more frequently than required by permit. N
- (d) If (c) is yes, are results in permittee's self-monitoring report..... N/A
- (e) Commercial laboratory used..... Y

Parameters analyzed by commercial lab: Metals, Oil & Grease, Nitrite, Nitrate

Lab name:

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... N/E
- (g) Satisfactory calibration and maintenance of instruments/equipment. N/E
- (h) Adequate records maintained..... N/E
- (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory

Date:

Comments/Status:



Permit # :
 NPDES #: Error! Reference source not found.

Section J: Effluent/Receiving Water Observations

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	NE	NE	NE	NE	NE	NE	NE	NE

Comments/Status:

Due to construction materials and rain access to the final outfall was limited.

Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status:

There were several areas at the site that have been distured (construction activities to install new preliminary treatment, flow equalization, UV disinfection, and sludge handling facilities).



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Inspection Findings

National Pollutant Discharge Elimination System (NPDES) permit number 1PK00002*JD was issued to the Logan County Board of Commissioners on June 27, 2006. This permit expires on January 31, 2011.

This permit contains a compliance schedule for elimination of collection system overflows and a secondary bypass at the plant. Phase 1 construction is underway. This work includes a new force main and lift station in the slough area, new influent fine screens, conversion of the primary clarifiers to equalization and installation of a new 1.55 MG equalization tank, new UV disinfection, conversion of the anaerobic digesters to aerobic digesters, and construction of a new solids handling building (including belt press, and septage receiving station).

As part of the plant upgrades the treatment process type will be converted to extended aeration.

Infiltration and Inflow into the collection system has contributed to collection system overflows and treatment bypassing.

Flows in excess of 4.6 mgd are bypassed around the secondary treat. This flow recombines prior to disinfection. The system is capable of capturing first flush flows prior to going into bypass mode.

A Capacity, Management, Operations, and Maintenance (CMOM) plans is currently being developed for the collection system.

There are twenty eight lift stations in the collection system. The sewer district uses four portable generators to provide back-up power to these stations. All of the stations have generator hook-up capabilities and bypass pumping capabilities. There are over 300 individual grinder pumps in the system. A large portion of the collection system maintenance time is spent working on them. The sewer district has five collection system maintenance staff.

In August, 2008 the sewer district received complaints of odors coming from the Bellecenter Lift station. In order to control odors the sewer district feeds ferric sulfate at the O Conner's Landing lift station and the Bellecenter lift station. An E-One pump station was installed on the complainants lateral to help control odors. The long term plan is to eliminate the Bellecenter station and go with gravity.



Inspection Findings (cont.)

Individual operator log books are being kept in the various buildings at the plant. In accordance with OAC 3745-7-09 (A), these records should be *maintained in one of the following forms: hard bound book (with consecutive page numbering), time cards, separate operation and maintenance records, or well organized computer logs. Additionally, the date and times of arrival and departure for the operator of record and any other operated required per this rule should be maintained in the log.*

The electronic alarm system at the plant went down last year. The alarm system is scheduled to be replaced as part of the new System Control and Data Acquisition (SCADA) control system. In the interim plant personnel are monitoring for system failures.

Operator 10 software is currently being used to record maintenance activities. Equipment cut sheets are being used as part of the operational procedures for most of the treatment units.

At the time of the inspection the circulation unit on the anaerobic digester was not working. This failure has not impacted facility compliance because all of the waste solids are currently being land filled. The anaerobic digesters are being converted to aerobic digesters as part of the plant upgrade.

Currently the sewer district hauls all waste solids to a sanitary landfill. Allied waste provides contract hauling services. The sewer district currently does not produce a Class A or B sludge. Additionally the district does not provide 120 days of solids storage. Both of these items are being addressed as part of the plant upgrade. The district currently produces 200 dry tons of solids per year.

Final effluent Bioassay results from a January, 2009 sampling event showed no acute toxicity to the *P. promelas* and *C. dubia* test organisms.

The USEPA entered into a consent agreement with the sewer district in May, 2007. The agreement involved the sewer districts monitoring and reporting of their waste sludge. A settlement was reportedly reached in September of 2008.

Between January, 2008 and February 2009 the sewer district reported the following final effluent numeric limits violations: (1) ammonia, (2) TSS, (5) chlorine, and (1) fecal coliform.



Facility Inspection

As part of the phase 1 plant upgrades the old press building is being converted to office space. The upgraded facilities will include operations and collections offices, a map room, conference room, and SCADA control center.

Conversion of the old primary anaerobic digester to aerobic digestion has begun. Construction of an additional aerobic digester also is underway. Due to cost, the two existing secondary digesters will not be demolished at this time.

Construction of the new press / septage receiving building is underway. The steel frame has been erected.

The grit removal system has been removed. The new fine screen building is being constructed in its place. The new force main from the slough area will be tied directly to this building.

The new equalization tank is under construction. The concrete walls have been erected.

The primary clarifiers remain on-line. Solids from the secondary system were returned to allow for emptying of one of the aeration tanks. The clarifiers had a black color. Bubbles were noted on the surface.

Two of three aeration tanks were on-line. Uniform mixing was occurring. The mixed liquor was dark brown. New diffusers were being added to the tank that was off line.

Flows from the aeration system are divided between the two secondary clarifiers through a valved splitter chamber. As part of the upgrade a new distribution chamber will be installed with individual pumps.

There are two secondary clarifiers. During dry periods only one clarifier is on-line. The second clarifier is placed on-line during high flows. At the time of this inspection one clarifier was on-line. Ashing solids were leaving the tank.

As part of the phase 1 work a new UV disinfection system will be added. Construction on this system has not started. The existing chlorine system will remain to treat storm flows. The effluent from the chlorine contact tank appeared clear. White foam was forming in the effluent channel.



Facility Inspection (cont.)

Final effluent samples (time composites) are being collected prior to and after the chlorine system. Grab samples are being collected at the river. As part of the system upgrade the sewer district will be able to collect flow proportioned samples.

Due to rain and construction constraints, the final outfall was not inspected.

Items requiring a response

1. The attached Operator of Record (ORC) Notification Form, must be complete and returned to Ohio EPA, at the address noted, by no later than July 17, 2009. A copy of the notification should be submitted to the Ohio EPA Southwest District Office, 401 East Fifth Street, Dayton, Ohio 45402.
2. The operator log books at the facility must be updated to meet the requirements of OAC 3745-7-09 (A) (see attached). Written verification as to the completion of this update must be provided by no later than July 17, 2009.

